

IN THE CLAIMS:

1.-4. (Canceled)

5. (Currently Amended) ~~The plasma display panel of Claim 3,~~

A plasma display panel in which a pair of substrates are disposed so as to oppose each other and have a discharge space therebetween and in which a dielectric protection layer including MgO and phosphor layers for red, green, and blue respectively are formed so as to face the discharge space, wherein each of the phosphor layers contains at least one Group IV element in an amount that causes the impedance of the dielectric protection layer to rise by a same degree over the course of time in the discharge space that corresponds to the phosphor layers red, green and blue,

wherein a content ratio of said at least one Group IV element in each of the phosphor layers is within a range between 100 mass ppm and 5,000 mass ppm inclusive.

6. (Currently Amended) The plasma display panel of Claim 5 ~~Claim 3~~, wherein a phosphor member included in at least one of the phosphor layers contains, in a composition thereof, at least one Group IV element.

7. (Currently Amended) ~~The plasma display panel of Claim 3,~~

A plasma display panel in which a pair of substrates are disposed so as to oppose each other and have a discharge space therebetween and in which a dielectric protection layer including MgO and phosphor layers for red, green, and blue respectively are formed so as to face the discharge space, wherein each of the phosphor layers contains at least one Group IV element

in an amount that causes the impedance of the dielectric protection layer to rise by a same degree over the course of time in the discharge space that corresponds to the phosphor layers red, green and blue.

wherein a content ratio of said at least one Group IV element in each of the phosphor layers is within a range between 100 mass ppm and 50,000 mass ppm inclusive, and the content ratio is substantially same for all of the phosphor layers.

8. (Original) The plasma display panel of Claim 7, wherein
variations among the phosphor layers with respect to the content ratio of said at least one Group IV element are no larger than 20,000 mass ppm.
9. (Original) The plasma display panel of Claim 7, wherein
for each of the phosphor layers, a phosphor member containing, in a composition thereof, at least one Group IV element is selected so as to be included in the phosphor layer.
10. (Original) The plasma display panel of Claim 9, wherein
said at least one Group IV element contained in the composition of the phosphor member is in common with all of the phosphor layers.
11. -12. (Canceled)

13. (Currently Amended) The plasma display panel of Claim 5 ~~Claim 3~~, wherein in each of the phosphor layers, said at least one Group IV element contained is a compound being distinct from any phosphor members included in the phosphor layer.

14.- 17. (Canceled)

18. (Currently Amended) ~~The plasma display panel of Claim 16,~~ A plasma display panel in which a pair of substrates are disposed so as to oppose each other and have a discharge space therebetween and in which a dielectric protection layer including MgO and phosphor layers for red, green, and blue respectively are formed so as to face the discharge space, wherein each of the phosphor layers contains at least one transition metal in an amount that causes the impedance of the dielectric protection layer to rise by a same degree over the course of time in the discharge space that corresponds to the phosphor layers red, green and blue,

wherein a content ratio of said at least one transition metal in each of the phosphor layers is within a range between 500 mass ppm and 30,000 mass ppm inclusive.

19. (Currently Amended) The plasma display panel of Claim 18 ~~Claim 16~~, wherein a phosphor member included in at least one of the phosphor layers contains, in a composition thereof, at least one transition metal.

20. (Currently Amended) The plasma display panel of Claim 18 ~~Claim 16~~, wherein said at least one transition metal is selected from the group consisting of W, Mn, Fe, Co, and Ni.

21. (Currently Amended) ~~The plasma display panel of Claim 20,~~

A plasma display panel in which a pair of substrates are disposed so as to oppose each other and have a discharge space therebetween and in which a dielectric protection layer including MgO and phosphor layers for red, green, and blue respectively are formed so as to face the discharge space, wherein each of the phosphor layers contains at least one transition metal in an amount that causes the impedance of the dielectric protection layer to rise by a same degree over the course of time in the discharge space that corresponds to the phosphor layers red, green and blue,

wherein a content ratio of said at least one transition metal in each of the phosphor layers is within a range between 300 mass ppm and 120,000 mass ppm inclusive, and the content ratio is substantially same for all of the phosphor layers.

22. (Original) The plasma display panel of Claim 21, wherein variations among the phosphor layers with respect to the content ratio of said at least one transition metal are no larger than 40,000 mass ppm.

23. (Original) The plasma display panel of Claim 21, wherein for each of the phosphor layers, a phosphor member containing, in a composition thereof, at least one transition metal is selected so as to be included in the phosphor layer.

24. (Original) The plasma display panel of Claim 23, wherein said at least one transition metal contained in the composition of the phosphor member is in common with all of the phosphor layers.

25. – 28. (Canceled)

29. (Currently Amended) ~~The plasma display panel of Claim 27,~~

A plasma display panel in which a pair of substrates are disposed so as to oppose each other and have a discharge space therebetween and in which a dielectric protection layer including MgO and phosphor layers for red, green, and blue respectively are formed so as to face the discharge space, wherein each of the phosphor layers contains at least one member of the group consisting of alkali metals and alkaline earth metals other than Mg in an amount that causes the impedance of the dielectric protection layer to rise by a same degree over the course of time in the discharge space that corresponds to the phosphor layers red, green and blue,

wherein a total content ratio of said at least one member in each of the phosphor layers is within a range between 1,000 mass ppm and 60,000 mass ppm inclusive.

30. (Original) The plasma display panel of Claim 29, wherein a phosphor member included in at least one of the phosphor layers contains, in a composition thereof, at least one member of the group consisting of alkali metals and alkaline earth metals other than Mg.

31. (Currently Amended) ~~The plasma display panel of Claim 27,~~

A plasma display panel in which a pair of substrates are disposed so as to oppose each other and have a discharge space therebetween and in which a dielectric protection layer including MgO and phosphor layers for red, green, and blue respectively are formed so as to face

the discharge space, wherein each of the phosphor layers contains at least one member of the group consisting of alkali metals and alkaline earth metals other than Mg in an amount that causes the impedance of the dielectric protection layer to rise by a same degree over the course of time in the discharge space that corresponds to the phosphor layers red, green and blue,

wherein a total content ratio of said at least one member in each of the phosphor layers is within a range between 300 mass ppm and 120,000 mass ppm inclusive, and the total content ratio is substantially same for all of the phosphor layers.

32. (Original) The plasma display panel of Claim 31, wherein variations among the phosphor layers with respect to the total content ratio of said at least one member are no larger than 40,000 mass ppm.

33. (Original) The plasma display panel of Claim 31, wherein for each of the phosphor layers, a phosphor member containing, in a composition thereof, at least one member of the group consisting of alkali metals and alkaline earth metals other than Mg is selected so as to be included in the phosphor layer.

34. (Original) The plasma display panel of Claim 31, wherein said at least one member contained in the composition of the phosphor member is in common with all of the phosphor layers.

35. – 41. (Canceled)

42. (Currently Amended) The plasma display panel of Claim 5 ~~Claim 3~~, wherein at least part of a surface of one or more of the phosphor layers facing the discharge space is covered with a phosphor protection layer, the phosphor protection layer (i) having an ultraviolet ray transmittance rate of 80 % or higher, and (ii) having a function of inhibiting one or more of elements included in the one or more phosphor layers that are to degrade discharge properties of the dielectric protection layer from dispersing into the discharge space.

43. (Original) The plasma display panel of Claim 42, wherein any of the phosphor layers whose surface facing the discharge space is covered by the phosphor protection layer contains one or more of (i) at least one Group IV element of no less than 1,000 mass ppm (ii) at least one transition metal of no less than 30,000 mass ppm, and (iii) at least one alkali metal or alkaline earth metal other than Mg of no less than 60,000 mass ppm.

44. (Original) The plasma display panel of Claim 42, wherein the phosphor protection layer covers the surfaces of all the phosphor layers.

45. (Original) The plasma display panel of Claim 42, wherein a main component of the phosphor protection layer is MgF₂.

46. (Original) The plasma display panel of Claim 42, wherein the phosphor protection layer has a lamination structure in which a first layer whose main component is MgO and a second layer whose main component is MgF₂ are laminated, and the first layer faces the discharge space.

47. (Original) The plasma display panel of Claim 46, wherein a thickness of the first layer is smaller than a thickness of the second layer.

48. (Currently Amended) The plasma display panel of Claim 5 ~~Claim 3~~, wherein said Group IV element is Si.

49. (Currently Amended) The plasma display panel of Claim 5 ~~Claim 3~~, wherein the dielectric protection layer contains at least one Group IV element.

50. (Canceled)

51. (Currently Amended) The plasma display panel of Claim 18 ~~Claim 16~~, wherein the dielectric protection layer contains at least one Group IV element.

52. (Canceled)

53. (Currently Amended) The plasma display panel of Claim 29 ~~Claim 27~~, wherein the dielectric protection layer contains at least one Group IV element.

54. (Canceled)

55. (Currently Amended) The plasma display panel of Claim 5 ~~Claim 3~~, wherein

the dielectric protection layer contains at least one transition metal.

56. (Canceled)

57. (Currently Amended) The plasma display panel of Claim 18 ~~Claim 16~~, wherein the dielectric protection layer contains at least one transition metal.

58. (Canceled)

59. (Currently Amended) The plasma display panel of Claim 29 ~~Claim 27~~, wherein the dielectric protection layer contains at least one transition metal.

60. (Canceled)

61. (Currently Amended) The plasma display panel of Claim 5 ~~Claim 3~~, wherein the dielectric protection layer contains at least one member of the group consisting of alkali metals and alkaline earth metals.

62. (Canceled)

63. (Currently Amended) The plasma display panel of Claim 18 ~~Claim 16~~, wherein the dielectric protection layer contains at least one member of the group consisting of alkali metals and alkaline earth metals.

64. (Canceled)

65. (Currently Amended) The plasma display panel of Claim 29 ~~Claim 27~~, wherein the dielectric protection layer contains at least one member of the group consisting of alkali metals and alkaline earth metals.

66. (Canceled)

67. (Currently Amended) The plasma display panel of Claim 18 ~~Claim 16~~, wherein at least part of a surface of one or more of the phosphor layers facing the discharge space is covered with a phosphor protection layer, the phosphor protection layer (i) having an ultraviolet ray transmittance rate of 80 % or higher, and (ii) having a function of inhibiting one or more of elements included in the one or more phosphor layers that are to degrade discharge properties of the dielectric protection layer from dispersing into the discharge space.

68. (Currently Amended) The plasma display panel of Claim 29 ~~Claim 27~~, wherein at least part of a surface of one or more of the phosphor layers facing the discharge space is covered with a phosphor protection layer, the phosphor protection layer (i) having an ultraviolet ray transmittance rate of 80 % or higher, and (ii) having a function of inhibiting one or more of elements included in the one or more phosphor layers that are to degrade discharge properties of the dielectric protection layer from dispersing into the discharge space.

69. (New) The plasma display panel of Claim 21, wherein said at least one transition metal is selected from the group consisting of W, Mn, Fe, Co, and Ni.